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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------|-------------|----------------------|---------------------|------------------|
| 09/450,680 | 11/30/1999 | MITSUJI MARUMO | 35.G2504 | 8003 |
| 5514 | 7590 | 04/22/2004 | EXAMINER | |
| FITZPATRICK CELLA HARPER & SCINTO | | | RAO, SHRINIVAS H | |
| 30 ROCKEFELLER PLAZA | | | ART UNIT | |
| NEW YORK, NY 10112 | | | PAPER NUMBER | |

2814

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/450,680 | MARUMO, MITSUJI | |
| | Examiner | Art Unit | |
| | Steven H. Rao | 2814 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/062004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-33 and 38-40 is/are pending in the application.
- 4a) Of the above claim(s) 38-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 22-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of paper submitted under 35 U.S.C. 120 claiming priority from U.S. Serial No 09/450,680 filed on January 12, 004 as an RCE of U.S. Serial No. 09/450680 filed on December 19, 2002 which itself claims priority from Japanese Patent Application No. 357007/1998 filed on 12/02 /1998, which papers have been placed of record in the file.

Continued Prosecution Application

The request filed on 01/12/2004 for a Request for Continued Prosecution Application (RCE) under 37 CFR 1.1114 based on parent Application No. 09/450,680 is acceptable and a RCE has been established. An action on the RCE follows.

Preliminary Amendment Status

Acknowledgment is made of the 37 CFR 1.116 amendment filed 11/12/2003 which has been entered partially as follows.

Claims 22-33 as recited in the amendment of 11/12/2003 are entered.

Claims 38-40 drawn to non-elected method claims are not entered.

It is noted (as also stated in the Advisory Action) that the Examiner restricted the claims between method claims and device (apparatus) claims on 10/04/2001 and Applicants' elected only device (apparatus claims) on 03/22/2002 and the prosecuted only device claims.

Claims 1-21, 34 to 37 were previously cancelled.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 28, 29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The element of the apparatus recited in claim

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28 namely an "Importing unit" was not mentioned described in the specification as originally filed.

.Claims 30-33 are rejected at least for depending upon rejected claim 28.

Appropriate correction is required.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

In claim 22 the phrase "said pod being pressed against an electromagnetic shielded chamber" renders the claim indefinite because it is not clear what Applicants' intend to include/exclude by the term "said pod being pressed against an electromagnetic shielded chamber'.

Similarly " walls which form the opening " is not clear , Applicants' may recite an opening defined by the walls, if this is correct.

Similarlry " an electro-magnetic shield member which is provided by said walls " can be recited as an electro-magnetic shield member which is formed by said walls, if correct.

Similarly , " at least a portion of said electromagnetic shield member being provided on said walls so as to contact the electromagnetic-shield chamber so that said electromagnetic shield member is grounded through the electromagnetic – shielded chamber " , it is not understood what Applicants' intend to include/exclude by he above recitation.

Appropriate correction is required.

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Claims 23 to 27 are rejected for at least depending upon rejected claim 22.

Claim 28 does not have all the elements of the Apparatus recited in logical sequence to constitute the Apparatus. .

Claims 29-33 are rejected at least for depending upon rejected claim 28.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22-37, to the extent understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPR (Applicants' Admitted Prior Art) in view of Drake et al. (U. S. Patent No. 5,006,760, herein after Drake) .

With respect to claim 22, AAPR describes a pod, said pod being pressed against an electromagnetic shielded chamber of a device manufacturing apparatus which imports the substrate through an opening of said pod and processes the substrate, said pod comprising : which has walls and a lid for an opening formed by said walls, and is capable on including a substrate, the pod comprising :

Walls which form the opening (AAPR figure 1) .

A lid for the opening (AAPR figure 1) and

AAPR does not specifically mention an electromagnetic shield member which is provided by said walls .

However Drake in figures 1 and col. 2 lines 25-31 describes an electromagnetic shield to form an outer surface that protects the wafer inside from electromagnetic radiation.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include Drake's pod including an electro magnetic shield in AAPR's device to form an outer surface that protects the wafer inside from electromagnetic radiation.

The other limitations of claim 22 are :

At least a portion of said electromagnetic –shielded chamber being provided on said walls so as to contact the electromagnetic shielded chamber so that said electromagnetic shielded member is grounded through the electromagnetic-shielded chamber. (Drake figure 1 # 17, col. 2 lines 33- 35) (Drake figure 1) (Drake figure 1, col. 2 lines 33-35 , flange 17 contacts ground 26 through shield 27).

With respect to claim 23, to the extent understood ,wherein said lid is arranged in front of the pod. (AAPR spec. pages 2 lines 29 to page 3 line 12)

With respect to claim 24 to the extent understood, wherein said lid is arranged in a bottom of the pod. (AAPR spec. pages 2 lines 29 to page 3 line 12)

With respect to claim 25 to the extent understood, wherein said electromagnetic shield comprises wire mesh provided on or within walls of said pod. (AAPR spec. page 3 lines 21-22).

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With respect to claim 26, to the extent understood, wherein said electromagnetic shield comprises metal coatings provided on walls of said pod. (AAPR spec. page 3 lines 17-18 , inherent instead of the shielded metal covering metal coating can be used).

With respect to claims 28, to the extent understood, AAPR describes an apparatus for manufacturing a device using a substrate said apparatus comprising : an electromagnetic shielded chamber ; (AAPR figure 10) an importing unit which imports the substrate through an opening of a pod pressed against said electromagnetic-shielded chamber (provided applicants can show support in the specification as originally filed AAPR figure 1) (AAPR fig. 10 # 100, spec. page 2 line 8) and a processing unit, which processes the substrate imported by said importing unit. (APPR #s 6-11 and 39).

The limitations, "a processing unit, which processes the substrate imported by said importing unit" and "wherein a portion ,against which the pod is to be pressed, of said electromagnetic shielded chamber is grounded " is a product by process limitation recited in a device claim and therefore cannot be given patentable weight .

It is well settled law that a product by process claim is directed to the product per se, no matter how actually made . See *In re Fessman*, 180 USPQ 324, 326 (CCPA 1974); *In re Marosi et al.* 218 USPQ 289, 292 (Fed. Cir 1983) all of which make it clear that it is the patentability of the final structure of the product gleaned from the process steps, which must be determined in a product by process claim, and not the patentability of the process. See Also MPEP 2113. More ever an old or obvious product produced by a new

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method is not a patentable product, whether claimed in "product by process" claims or not

With respect to claim 29 to the extent understood, wherein pod further including a flange, wherein when said pod is installed in the shielded chamber, the flange touches the shielded chamber on the surface. (Drake fig. 1 # 13 touching 25).

With respect to claims 30, to the extent understood, wherein the processing chamber exposes the substrate to radiation. (AAPR spec. page 1 lines 16-17, for exposing wafer with radiation is a product by process and therefore no patentable weight can be given).

With respect to claims 31 and 32, wherein the pods are front opening type and bottom opening type (AAPR page 3 lines 4 to 6) (AAPR page 2 lines 30-33).

B. Claims 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPR (Applicants' Admitted Prior Art) and Drake et al. (U.S. Patent No. 5,006,760, herein after Drake) as applied to claims 22-26 etc. above and further in view of Akagawa (U.S. Patent No. 4,856,904 herein after Akagawa) .

With respect to claims 27 to the extent understood, wherein said electromagnetic shield comprises shielding materials provided in walls of said pod.

AAPR and Drake do not specifically mention shielding materials provided in walls of the pod.

However, Akagwa fig.2 # 46, 47 and col.2 line 64 and col. 6 lines 64-68 describes shielding materials provided in walls of the pod to provide shield materials in

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intermetant unspecified locations to reduce the electromagnetic leakage and provide a lighter (less weight) shield.


Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include Akagwa's shielding materials provided in walls of the pod to provide shield materials in intermetant unspecified locations to reduce the electromagnetic leakage and provide a lighter (less weight) shield.

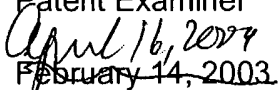
Response to Arguments

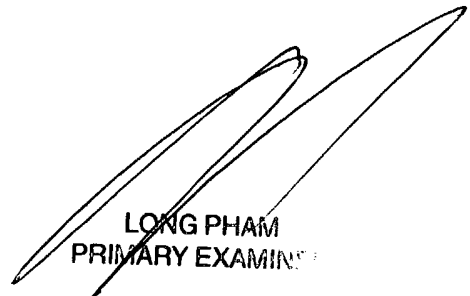
Applicant's arguments filed 5/29/03 have been fully considered but they are not persuasive because as shown above all the presently recited limitations are taught by the applied prior art.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Steven H. Rao whose telephone number is (703) 306-5945. The examiner can normally be reached on Monday- Friday from approximately 7:00 a.m. to 5:30 p.m.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956. The Group facsimile number is (703) 308-7724.


Steven H. Rao

Patent Examiner

April 16, 2004
~~February 14, 2003~~


LONG PHAM
PRIMARY EXAMINER